

12/30/02

12-36-82

PATENT

Jonathan J. Hull
Application No.: 09/656,039
Page 2

8 transmitter to cause a cellular telephone to transmit the data output from the camera
9 memory;

10 a receiving station coupled to the cellular telephone transmitter by a
11 cellular network to receive image data;

12 means, at the receiving station, for image processing;

13 means for resetting the camera memory to be reused for subsequent
14 images once an image is transmitted to the receiving station;

15 a return link for sending commands from the receiving station to the CPU,

16 wherein the commands are directions for obtaining further images as needed by the

17 means for image processing; and

18 an image storage device coupled to the receiving station to store images
19 received by the receiving station.

1 2. The apparatus of claim 1, wherein the CPU interfaces to a camera
2 memory of an existing digital still camera.

1 3. The apparatus of claim 1, wherein the cellular telephone
2 transmitter comprises:

3 a standard cellular telephone; and

4 a cellular modem.

1 4. The apparatus of claim 1, further comprising means for packaging
2 images as electronic mail messages prior to transmission by the cellular telephone
3 transmitter.

1 5. The apparatus of claim 1, further comprising means for handling a
2 serial line interface protocol connection between the cellular telephone transmitter and
3 the receiving station.

1 6. The apparatus of claim 1, further comprising means for encrypting
2 image data prior to transmission by the cellular telephone transmitter.

Jonathan J. Hull
Application No.: 09/656,039
Page 3

PATENT

1 7. The apparatus of claim 1, further comprising a means for causing
2 the digital still camera to capture images on a periodic basis, wherein the CPU is
3 programmed to periodically transmit an image to free the camera memory for accepting
4 subsequent images.

1 8. The apparatus of claim 1, further comprising means for
2 determining a location of the portable image transfer system and means for including a
3 location indication with each image.

1 9. The apparatus of claim 1, wherein the commands represent user
2 directions to be displayed at the remote station directing the user to capture additional
3 images as needed by the means for image processing.

1 10. The apparatus of claim 1, wherein the commands are directions
2 directed at the remote station directing the digital still camera or CPU to capture
3 additional image data as needed by the means for image processing.

1 11. The apparatus of claim 1, further comprising a remote printing
2 device for printing images processed by the receiving station.

1 12. The apparatus of claim 11, wherein the remote printing device is
2 one of a facsimile machine, a digital copier or a printer.

1 13. The apparatus of claim 8, further comprising means, within the
2 receiving station, for using the location indication as a variable when processing said
3 each image.

1 14. A portable image transfer system comprising:
2 a digital still camera, at a remote station, which captures images in digital
3 form and stores the images in a camera memory;
4 a cellular telephone transmitter;

Jonathan J. Hull
Application No.: 09/656,039
Page 4

PATENT

5 a central processing unit (CPU) coupled to the camera memory and the
6 cellular telephone transmitter, wherein the CPU controls the camera memory to cause it
7 to output data representing an image and the CPU controls the cellular telephone
8 transmitter to cause a cellular telephone to transmit the data output from the camera
9 memory;

10 a receiving station coupled to the cellular telephone transmitter by a
11 cellular network to receive image data;

12 means, at the receiving station, for image processing;

13 means for resetting the camera memory to be reused for subsequent
14 images;

15 a return link for sending commands from the receiving station to the CPU,
16 wherein the commands are directions for obtaining further images as needed by the
17 means for image processing; and

18 an image storage device coupled to the receiving station to store images
19 received by the receiving station.

1 15. The apparatus of claim 14, wherein the CPU is configured to
2 format the images into electronic mail messages prior to transmission by the cellular
3 telephone transmitter.

1 16. The apparatus of claim 14, further comprising a component to
2 provide location information relating to the location of the portable image transfer
3 system, the CPU being configured to include location information with each image.

1 17. (Previously Amended) A portable image transfer system
2 comprising:
3 a digital still camera, at a remote station, which captures one or more
4 images in digital form and stores the images in a camera memory;
5 a cellular telephone transmitter for communication with a receiving
6 station;

Jonathan J. Hull
Application No.: 09/656,039
Page 5

PATENT

7 a return link for receiving commands from the receiving station to the
8 CPU; and

9 a central processing unit (CPU) coupled to the camera memory and the
10 cellular telephone transmitter, the CPU being configured to control the camera memory
11 to produce output data representing the images formatted as one or more electronic mail
12 messages, the CPU further being configured to control the cellular telephone transmitter
13 to transmit the output data from the camera memory to the receiving station.

1 18. The portable image transfer system of claim 17 wherein the one or
2 more electronic mail messages is provided in MIME format.

1 19. The portable image transfer system of claim 17 further including
2 means for connecting to the receiving station using a predetermined communication
3 protocol.

1 20. The portable image transfer system of claim 17 wherein the CPU is
2 further configured to connect to an external printing device via the cellular telephone
3 transmitter.

1 21. (Previously Amended) A portable image transfer system
2 comprising:

3 a digital still camera, at a remote station, which captures one or more
4 images in digital form and stores the images in a camera memory;

5 a cellular telephone transmitter for communication with a receiving
6 station;

7 circuitry to produce information relating to the location of the portable
8 image transfer system;

9 a return link for receiving commands from the receiving station to the
10 CPU; and

Jonathan J. Hull
Application No.: 09/656,039
Page 6

PATENT

11 a central processing unit (CPU) coupled to the camera memory, to the
12 circuitry, and to the cellular telephone transmitter, the CPU being configured to control
13 the camera memory to produce output data representing a combination of the images and
14 the location information, the CPU further being configured to control the cellular
15 telephone transmitter to transmit the output data from the camera memory to the
16 receiving station.

1 22. The portable image transfer system of claim 21 wherein the output
2 data represent the images and the location information in an electronic mail message.

1 23. The portable image transfer system of claim 21 further including
2 means for connecting to the receiving station using a predetermined communication
3 protocol.

1 24. The portable image transfer system of claim 21 wherein the CPU is
2 further configured to connect to an external printing device via the cellular telephone
3 transmitter.

1 25. (New) A portable image transfer apparatus comprising:
2 a cellular telephone transmitter component;
3 an image capture component for producing digital images;
4 a memory operatively coupled to the image capture interface to receive
5 and store one or more digital images;
6 a controller coupled to the memory and to the cellular telephone
7 transmitter component, the controller configured to produce output data representing the
8 images, the controller further configured to control the cellular telephone transmitter
9 component to communicate with a receiving station to transmit the output data from the
10 memory to the receiving station; and
11 a return link for receiving commands from the receiving station.

Jonathan J. Hull
Application No.: 09/656,039
Page 7

PATENT

1 26. (New) The portable image transfer system of claim 25 wherein the
2 image capture component is a digital camera.

1 27. (New) The portable image transfer system of claim 25 wherein the
2 image capture component is an interface to a digital camera.

1 28. (New) The portable image transfer system of claim 25 wherein the
2 controller is further configured to receive one or more images from the receiving station.

1 29. (New) The portable image transfer system of claim 25 wherein the
2 controller is further configured to communicate with the receiving station using a
3 predetermined communication protocol.

1 30. (New) The portable image transfer system of claim 25 wherein the
2 controller is further configured to communicate with the receiving station to send the
3 image over the Internet.

1 31. (New) The apparatus of claim 25, wherein the controller is further
2 configured to format the images into one or more electronic mail messages prior to
3 transmission by the cellular telephone transmitter.

1 32. (New) The portable image transfer system of claim 31 wherein the
2 one or more electronic mail messages is provided in MIME format.

1 33. (New) The apparatus of claim 25, wherein the cellular telephone
2 transmitter comprises a standard cellular telephone and a cellular modem.

1 34. (New) The apparatus of claim 25, wherein the controller is further
2 configured to encrypt image data prior to transmission by the cellular telephone
3 transmitter.

1 35. (New) The apparatus of claim 25, wherein the controller is further
2 configured to control the image capture device to periodically capture images and to
3 periodically transmit image data to the receiving station.

Jonathan J. Hull
Application No.: 09/656,039
Page 8

PATENT

1 36. (New) A telecommunication system comprising:
2 a communication component for receiving image data originating from a
3 cellular telephone device;
4 a data store for storing the image data;
5 a return link for sending commands to the cellular telephone device; and
6 a controller coupled to the communication component and to the image
7 data store, the controller configured to process the image data and to communicate the
8 image data over the Internet.

1 37. (New) The telecommunication system of claim 36 wherein the
2 cellular telephone device is an image transfer apparatus as recited in claim 25.

1 38. (New) An image processing system comprising:
2 a communication component for receiving image data originating from a
3 cellular telephone device, the cellular telephone device comprising an image transfer
4 apparatus as recited in claim 25;
5 an image data store for storing the image data; and
6 a controller coupled to the communication component and to the image
7 data store, the controller configured to process the image data and to communicate the
8 image data over the Internet.

1 39. (New) The image processing system of claim 38 wherein the
2 controller is further configured to transmit one or more images to the cellular telephone
3 device.

1 40. (New) An image processing system comprising:
2 a communication component for receiving image data originating from a
3 cellular telephone device, the cellular telephone device comprising an image transfer
4 apparatus as recited in claim 27;
5 an image data store for storing the image data; and